

Uniform Toxics Criteria for Aquatic Life and Human Health in Zone 1

TCS Mtg
November 5, 2012



Background

- ❑ The TAC established a Toxic Criteria Subcommittee to evaluate recent data and methodologies for establishing water quality criteria for human health and aquatic life with the following objectives:
 - ✓ *To review the basis for existing DRBC water quality criteria and develop recommendations regarding revisions as needed to reflect the current science and risk assessment procedures in Zones 2 through 5.*
 - ✓ *To develop uniform criteria in shared waters of Zones 1 through 6 that harmonize DRBC criteria with basin states.*

Aquatic Life Criteria Revisions

- ❑ Reviewed current EPA recommended national criteria and standards adopted by basin states
- ❑ Changes reflected new scientific information and harmonize DRBC criteria with basin states
- ❑ Proposed criteria that differ from current DRBC stream quality objectives:
 - ❑ 17 Freshwater acute criteria
 - ❑ 13 Freshwater chronic criteria
 - ❑ 16 Marine acute criteria
 - ❑ 7 Marine chronic criteria

Human Health Criteria Revisions

- ❑ Proposed human health criteria were developed in accordance with the Methodology for Ambient Water Quality Criteria for the Protection of Human Health (2000)
 - ❑ 17.5 g/day fish intake in all Zones
 - ❑ 70 kg body weight
 - ❑ 2L drinking water
 - ❑ BCF used instead of BAF
- ❑ Some criteria were modified based on methods adopted by one or more basin state
 - 1) using relative potency factors (PAHs)
 - 2) following NJDEP Group C carcinogens policy
 - 3) including relative source contribution (RSC) when RSC are included in finalized EPA criteria or standards adopted by basin states
 - 4) using updated IRIS data not yet incorporated in national criteria

Current Status

☐ Toxic Criteria Subcommittee :

- ✓ Water Quality Criteria for Toxic Pollutants in the tidal portion of the DRB were updated in Zones 2 to 5 and adopted for Zone 6 in December 2010
- ✓ *The DRBC's Toxics Advisory Committee has recommended that the DRBC adopt toxics criteria for the non-tidal Delaware River (Zone 1).*
- ✓ *TCS to clarify and assess any technical challenges associated with uniform toxics criteria in Zone 1 (e.g. hardness based metals criteria in these non-tidal freshwaters).*
- ✓ *TCS to report back to the TAC on recommendations.*

Materials

❑ Prepared for Toxic Criteria Subcommittee :

- ✓ *Proposed DRBC stream quality objectives for human health in Zone 1 with comparisons to current EPA criteria and basin state standards.*
- ✓ *Proposed DRBC acute and chronic stream quality objectives for aquatic life in Zone 1 with comparison to current EPA criteria and basin state standards.*
- ✓ *Comparison of hardness based metal criteria using existing water quality values for Zone 1.*